

# Comparisons of Job Characteristics

**Focus Occupation:** [Locomotive Engineers \(53-4011\)](#)

**Associated Occupation:** [Railroad Conductors and Yardmasters \(53-4031\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 93

**Focus Occupation:** Locomotive Engineers (53-4011)

**Associated Occupation:** Railroad Conductors and Yardmasters (53-4031)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Transportation	4.6	14.9	13.9	0 Current knowledge level may be sufficient
Public Safety and Security	6.9	10.1	8.7	< Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 79

**Focus Occupation:** Locomotive Engineers (53-4011)

**Associated Occupation:** Railroad Conductors and Yardmasters (53-4031)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Monitoring	9.9	12.0	10.8	< A higher skill level may be required
Complex Problem Solving	9.1	11.5	8.4	<< Extensive development of skills in this area may be required
Coordination	9.1	11.4	6.9	<< Extensive development of skills in this area may be required
Time Management	8.9	10.8	8.2	<< Extensive development of skills in this area may be required
Management of Personnel Resources	6.9	10.6	7.3	<< Extensive development of skills in this area may be required
Operation Monitoring	6.6	10.3	13.3	>> Skill level is likely more than sufficient
Operation and Control	5.4	9.0	13.6	>> Skill level is likely more than sufficient
Quality Control Analysis	5.9	8.7	8.3	0 Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 79			
Focus Occupation: Locomotive Engineers (53-4011) Associated Occupation: Railroad Conductors and Yardmasters (53-4031)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Far Vision	7.8	13.5	14.7	0	Current ability level may be sufficient
Auditory Attention	5.9	11.8	12.6	0	Current ability level may be sufficient
Reaction Time	4.8	11.2	14.4	>>	Current ability level is likely more than sufficient
Depth Perception	5.3	10.1	11.8	>	Current ability level is likely sufficient
Response Orientation	4.0	8.9	13.6	>>	Current ability level is likely more than sufficient
Glare Sensitivity	2.6	7.0	7.6	0	Current ability level may be sufficient
Spatial Orientation	2.7	6.2	7.3	>	Current ability level is likely sufficient
Peripheral Vision	2.2	5.9	7.4	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 90
Focus Occupation: Locomotive Engineers (53-4011) Associated Occupation: Railroad Conductors and Yardmasters (53-4031)		
Work Activities	Exclusivity of Activity	
Direct and coordinate activities of workers or staff	3	
Inspect railroad equipment	89	
Monitor railroad vehicle or equipment operation	89	
Perform safety inspections in transportation setting	62	
Read switching order, train orders, or arrival or departure schedules	92	
Receive instructions from traffic control personnel	92	
Understand railroad signals	89	
Understand technical operating, service or repair manuals	6	
Use two-way radio or mobile phone	42	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 84

**Focus Occupation: Locomotive Engineers (53-4011)**

**Associated Occupation: Railroad Conductors and Yardmasters (53-4031)**

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Computers	1
Personal communication devices	2
Railroad support equipment and systems	70
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.